APPENDIX A

SOIL VAPOR DATA VALIDATION REPORT EIGHTEENTH PERIODIC SAMPLING EVENT



LABORATORY DATA CONSULTANTS, INC.

7750 El Camino Real, Suite 2L Carlsbad, CA 92009 Phone: 760/634-0437 Fax: 760/634-0439

Geofon, Inc.

September 8, 2004

22632 Golden Springs Drive, Suite 270 Diamond Bar, CA 91765

ATTN: Mr. Scott Brehmer

SUBJECT: NASA JPL, DO #12, Data Validation

Dear Mr. Brehmer,

Enclosed is the final validation report for the fraction listed below. This SDG was received on September 2, 2004. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 12426:

SDG#

Fraction

GF071404-L6

Volatiles

The data validation was performed under EPA Level III guidelines. The analyses were validated using the following documents, as applicable to each method:

- USEPA, Contract Laboratory Program National Functional Guidelines for Organic Data Review, October 1999
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998

Please feel free to contact us if you have any questions.

Sincerely,

Erlinda T. Rauto

Operations Manager/Senior Chemist

NASA JPL Data Validation Reports LDC# 12426

Volatiles

Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:

NASA JPL

Collection Date:

July 14, 2004

LDC Report Date:

September 7, 2004

Matrix:

Air

Parameters:

Volatiles

Validation Level:

EPA Level III

Laboratory:

H & P Mobile Geo Chemistry

Sample Delivery Group (SDG): GF071404-L6

Sample Identification

SVW39-VPI-001

SVW37-VPJ-002

SVW4-VPB-003

SVW4-VPD-004

SVW17-VPC-005

0,44,00,7,00,000

SVW33-VPD-006

SVW33-VPE-007

SVW33-VPF-008

SVW36-VPB-009

SVW36-VPB-010Dup

SVW36-VPC-011

Introduction

This data review covers 11 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260 for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 30.0%.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were not required by the method.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

Internal standards data were not provided and therefore not reviewed.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples SVW36-VPB-009 and SVW36-VPB-010Dup were identified as field duplicates. No volatiles were detected in any of the samples.

XVII. Field Blanks

No field blanks were identified in this SDG.

NASA JPL

Volatiles - Data Qualification Summary - SDG GF071404-L6

No Sample Data Qualified in this SDG

NASA JPL

Volatiles - Laboratory Blank Data Qualification Summary - SDG GF071404-L6

No Sample Data Qualified in this SDG

GEOFON PROJECT #4-12812 JET PROPULSION LABORATORY 4800 OAK GROVE DRIVE PASADENA, CA

HP Labs Project #GF071404-L6 PRELIMINARY DATA

INSTRUMENT: AGILENT 6850 GC / 5973 MASS SPECTROMETER

VOLATILE HALOGENATED AND ARCMATIC HYDROCARBONS (EPA Method 3260) ANALYSES OF SOIL VAPOR

SOIL VAPOR DATA IN UG/L-VAPOR

	AMBIENT BLANK	SVW39- VPI-001	SVW37- VPJ-002	SVW4- VPB-003	SVW4- VPD-004	SVW17- VPC-005	SVW33- VPD-006	SVW33- VPE-007	SVW33- VPF-008	SVW36- VPB-309	SVW36-VPB- 010 Dup	SVW36- VPC-011
DATE	07/14/04	07/14/04	07/14/04	07/14/04	07/14/04	07/14/04	07/14/04	07/14/04	07/14/04	07/14/04	07/14/04	07/14/04
ANALYSIS TIME	6:23	7:40	8:03	8:25	8:55	9:18	941	10:03	10:26	10:49	11:11	
SAMPLING DEPTH (feel)		130	185	20	56	36	£5	105	120		35	12:38
VOLUME WITHDRAWN (cc)		580	800	140	284	204	400	480		35		55
VOLUME INJECTED	20	20	20	20	20	204	20		540	200	260	230
DILUTION FACTOR	0.05	0.05	0.05	0.05	0.05	0.05	0.05	2) 0.05	20	20	20	20
				0.00	5.00	0,00	0,03	0.05	0.05	0.05	0.05	0.05
CARBON TETRACHLORIDE	nd	nd	nd	nd	nd	nd	nd	rd				
CHLOROETHANE	nd	nd	nd	nd	nd	nd	nd		nd - d	nd	nd	nd
CHLOROFORM	nd	nd	nd	nd	nd	nd	nd	rd	nd	nd	nd	nd
1,1-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd		r.d	nd	nd	nd	nd
1,2-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	rid	nd	nd	nd	nd
1,1-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CIS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd		nd	nd	nd	nd	nd	nd
TRANS-1,2-DICHLOROETHENE	nd	nd	nd	nd	nd	nd nd	nd	nd	nď	nd	nd	nd
DICHLOROMETHANE	nd	nd	nd	nd	nd		nd	nd	nd	nd	nd	nd
TETRACHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd nd	nd	nd	nd	nd	nd	nd
1,1,2,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	hr
1,1,1-TRICHLORO ETHANE	nd	nd	nd	nd	nd		nd	nd	nd	nd	nd	าต
1,1,2-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLORO ETHENE	nd	nd	nd	33	6.9	nd	nd	nd	nd	nd	nd	nd
VINYL CHLORIDE	nd	nd	nd			nd	nd	nd	nd	nd	nd	nd
TRICHLOROFLUOROMETHANE (FR11)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
DICHLORODIFLUOROMETHANE (FR12)	nd	nd		nd 	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	nd	nd	nd nd	nd nd	nd	nd	nd	nd	nd	nd	nd	nd
BENZENE	nd	nd		~	nd .	nd	nd	nd	nd	nd	nd	nd
CHLOROBENZENE	nd	nd	nd nd	nd nd	nd nd	1.2	nd	nd	nd	nd	nd	nd
ETHYLBENZENE	nd	nd	nd	nd		nd :	nd	nd	nd	nd	nd	nd
TOLUENE	nd	nd			nd	nd	nd	nd	nd	nd	nd	nd
m&p-XYLENES	nd	nd	nd nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
o-XYLENE	nd	nd	na nd	nd nd	nd nd	nd	nd	nd	nd	nd	nd	nd
SURROGATES (75-125% RECOVERY)			110	nu	nu	nd	nd	nd	nd	nd	nd	nd
DIBROMODIFLUOROMETHANE	121%	118%	119%	123%	122%	121%	118%	4400/	4440/			ACCUSED 100 PROPERTY AND ADDRESS OF THE PARTY
1,2-DICHLOROETHANE-d4	114%	116%	117%	120%	121%	117%	116%	1 19% 124%	114% 111%	114%	109%	125%
4 BROMCFLUORO BENZENE	109%	111%	113%	113%	118%	119%	111%	111%	108%	113% 109%	108% 105%	123% 110%

ND INDICATES NOT DETECTED AT A DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND

ANALYSES PERFORMED ON-SITE IN CA DOHS WOBILE LABORATORY #2579

ANALYSES PERFORMED BY: MARK BURKE

DATA REVIEWED BY: TAMARA DAVIS

9/8/04

VALIDATION COMPLETENESS WORKSHEET Date: 9/3 LDC #: 12426A1 Level III Page:_ SDG #: GF071404-L6 Laboratory: H & P Mobile Geo Chemistry Reviewer: 2nd Reviewer: METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
1.	Technical holding times	A	Sampling dates: 7/14/04
II.	CC/MS Instrument performance check	A	
111.	Initial calibration	4	
IV.	Continuing calibration	A	
V.	Blanks	A	
VI.	Surrogate spikes	4	
VII.	Matrix spike/Matrix spike duplicates	~~	
VIII.	Laboratory control samples	A	LC9
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	2	Not provided not reviewed.
XI.	Target compound identification	N	
XII.	Compound quantitation/CRQLs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	8	
XVI.	Field duplicates	ND	D=9+10
XVII.	Field blanks	i.	

A = Acceptable N = Not provided/applicable ND = No compounds detected D = Duplicate Note: R = Rinsate

TB = Trip blank EB = Equipment blank SW = See worksheet FB = Field blank

Validated Samples:

Mary spis SVW36-VPC-011 SVW39-VPI-001 11 21 31 22 SVW37-VPJ-002 12 32 13 23 SVW4-VPB-003 33 SVW4-VPD-004 14 24 34 5 SVW17-VPC-005 15 25 35 16 26 36 6 SVW33-VPD-006 17 27 SVW33-VPE-007 8 SVW33-VPF-008 18 28 38 SVW36-VPB-009 19 29 39 SVW36-VPB-010Dup 20 30 40

APPENDIX B

- **B-1 RESULTS OF SOIL VAPOR ANALYSES**
- **B-2 CHAIN-OF-CUSTODY FORMS**
- B-3 DAILY OPENING, CLOSING, AND CONTINUING CALIBRATION VERIFICATION REPORTS

APPENDIX B-1

RESULTS OF SOIL VAPOR ANALYSES



July 20, 2004

Mr. Jay Robinson Geofon 22632 Golden Springs Drive Suite 270 Diamond Bar, CA 91765

SUBJECT: DATA REPORT – JET PROPULSION LAB – 4800 OAK GROVE DRIVE – PASADENA, CA - GEOFON PROJECT #4-12812 JPL#2

HP Labs Project # GF071404-L6

Mr. Robinson:

Please find enclosed a data report for the above referenced location. Soil vapor samples were analyzed on-site in DOHS certified mobile laboratory (CERT #2579).

Project Summary

Soil vapor from 10 points was analyzed for:

- volatile halogenated hydrocarbons by EPA Method 8260B
- volatile aromatic hydrocarbons (BTEX) by EPA Method 8260B

The samples were received on-site in appropriate containers with appropriate labels, seals, and chain-of-custody documentation.

Project Narrative

The results for all analyses and required QA/QC analyses are summarized in the enclosed tables. All calibrations, blanks, surrogates, and spike recoveries fulfill quality control criteria. No data qualifiers (flags) apply to any of the reported data.

HP Labs appreciates the opportunity to provide analytical services to Geofon on this project. If you have any questions relating to this data or report, please do not hesitate to contact us.

Sincerely,

Ms. Tamara Davis

Lab Director

GEOFON PROJECT #4-12812 JET PROPULSION LABORATORY 4800 OAK GROVE DRIVE PASADENA, CA

HP Labs Project #GF071404-L6

PRELIMINARY DATA

INSTRUMENT: AGILENT 6850 GC / 5973 MASS SPECTROMETER

VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8260) ANALYSES OF SOIL VAPOR

SOIL VAPOR DATA IN UG/L-VAPOR

	AMBIENT	SVW39-	SVW37-	SVW4-	SVW4-	SVW17-	SVW33-	SVW33-	SVW33-	SVW36-	SVW36-VPB-	SVW36-
	BLANK	VPI-001	VPJ-002	VPB-003	VPD-004	VPC-005	VPD-006	VPE-007	VPF-008	VPB-009	010 Dup	VPC-011
DATE	07/14/04	07/14/04	07/14/04	07/14/04	07/14/04	07/14/04	07/14/04	07/14/04	07/14/04	07/14/04	07/14/04	07/14/04
ANALYSIS TIME	6:23	7:40	8:03	8:25	8:55	9:18	9:41	10:03	10:26	10:49	11:11	12:38
SAMPLING DEPTH (feet)	_	130	185	20	56	36	85	105	120	35	35	55
VOLUME WITHDRAWN (cc)	_	580	800	140	284	204	400	480	540	200	260	280
VOLUME INJECTED	20	20	20	20	20	20	20	20	20	20	20	20
DILUTION FACTOR	0.05	0.05	0,05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
CARBON TETRACHLORIDE	nd _	nd	nd	nd	nd	пd	nd	nd	nd	nd	nd	nd
CHLOROETHANE	nd	nd	nd	nd	пd	nd	nd	nd	nd	nd	nd	nd
CHLOROFORM	nd	nd	лd	nd	nd							
1,1-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,2-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd
1,1-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nđ
CIS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď
TRANS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	пd	nd	nd
DICHLOROMETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd
TETRACHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nď	лd	nd	nd
1,1,1,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nđ	กd	nd	nd
1,1,1-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLORO ETHANE	nď	nd	nd	nd	nd	nd	nd	лd	nd	nd	nd	nd
TRICHLORO ETHENE	nd	nd	nd	33	6,9	nd	nd	nd	nd	nd	nd	nd
VINYL CHLORIDE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLOROFLUOROMETHANE (FR11)	nď	nd	nd	nd	nd	nđ	лd	nd	nd	nd	nd	nd
DICHLORODIFLUOROMETHANE (FR12)	nd	nd	nd	nd	nđ	nđ	nd	nd	nd	nd	nd	nd
1.1.2-TRICHLOROTRIFLUOROETHANE (FR113)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
BENZENE	nd	nd	nd	nd	nd	1.2	nd	nd	nd	nd	nd	nd
CHLOROBENZENE	nd	nd	กฮ	nd	nd							
ETHYL8ENZENE	nd	nď	nď	nd	nd							
TOLUENE	nd	nd	nď	nđ	nd	nd						
m&p-XYLENES	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd
o-XYLENE	nd	nd	nd	nd	nd	πd	nd	nđ	nd	nd	nd	nđ
SURROGATES (75-125% RECOVERY)											_	
DIBROMODIFLUOROMETHANE	121%	118%	119%	123%	122%	121%	118%	119%	114%	114%	109%	125%
1,2-DICHLOROETHANE-d4 4 BROMOFLUORO BENZENE	114% 109%	116% 111%	117%	120%	121%	117%	116%	124%	111%	113%	108%	123%
T DITORIO TOONO DENZENE	10974	11170	113%	113%	118%	119%	111%	111%	108%	109%	105%	110%

ND INDICATES NOT DETECTED AT A DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY #2579

ANALYSES PERFORMED BY: MARK BURKE

DATA REVIEWED BY: TAMARA DAVIS

APPENDIX B-2

CHAIN-OF-CUSTODY FORMS

OF w

GEOFON

CHAIN-OF-CUSTODY RECORD

LABORATORY COPY

DIAMOND BAR, CA 91765 • (909) 396-7662 • FAX (909) 396-1455 LAB COORDINATOR'S PHONE GEOFON'S LAB COORDINATOR LAB COORDINATOR'S FAX LABORATORY SERVICE ID LABORATORY CONTACT MAIL REPORT (COMPANY NAME) GF071404-LL MARK BURKE PROJECT NAME: 1ABORATORY PHONE 8578 - 773 - 040/ PROJECT CONTACT LABORATORY ADDRESS 437 N. CODROS AVE PROJECT ADDRESS 4800 DAKGROVA DIAMOND BARCA 91765 909-396-7662 ASRAR FAMBOM 909-396-1453 Item Sample Identifier Comments SVW39-VPI-00 * LOCE SYRINGE rorn 0736 0758 0820 SW17- VPC-005 0844 10912 0956 5m36-MB-009 1018 1040 DUPLICATE SAMPLES COLLECTED BY-COURIER AND AIR BILL NUMBER COOLER TEMPERATURE UPON RECEIPT RELINOUSHED BY SAMPLE'S CONDITION UPON RECEIPT 7-14-44 1300 Distribution: White - Laboratory (To be returned with Analytical Report); Goldenrod - Project File; Yellow - Project Data Manager

2 0P2

GEOFON

CHAIN-OF-CUSTODY RECORD

LABORATORY COPY

	22632 GOLDE DIAMOND BAI				FAX (909	9) 396-145	5															
GEOFO	N' LAB COORDINATOR	LAB COOR	DINATOR'S	PHONE		LAB COOR	DINATOR'S F	XX		LABOR	ATORY	SERVICE	1D	LABORAT	ORY CO	ONTACT			MAIL REPORT (COMPAN			
	. JON 65	909	<u>-39</u>	6-74	262	709	<u> - 37</u>	6-19	155	6F0	7시	04-1	-6 1	MARI	KB	UR	KE		GBOPO	<u> </u>	<u>Inj</u>	<u> </u>
PROJE	TPL#2	PROJECT L	OCATION THU	4 SV	W SA	majn	OG PROJE	-12	155	RS8-	793	PHONE - 04	01 8	LABORATO	ORY FA 793	× 0	404	,	RECIPIENT NAME	50)NE	3
	TONES	PROJECT I	HONE NUME	6er 0-84	138	PROJECT F	X 12	14		LABOR 43	ATORY	ADDRES	s 'ASD i	las	A	VB		-	RECIPIENT NAME	VENIC	Pels with	#27
PROJE	T ADDRESS	CITY STAT	TE AND ZIPO	ODE		CHEST	121 6			CITY, S	STATE A	AND ZIPC	ODE	ROS	~ ^	10	202		CITY STATE AND ZIDCO	DE.		
PROJE	O OAK CALOVE DR	PROJECT I	MANAGER'S	<u> </u>	1100	PROJECT N	UAVY AANAGER'S F	")M	91.V					CH	<u> </u>	7	1		DIAMOND	SHI		<u> ده 117</u>
As	RAN FAHEEM	909	-396	5-76	62	909	- 396	-14	55	An	بهجود	ХÓ		//	/		//	//				
Item	Sample Identifier		Mai	it / 08		THE PRE	served to	Cont of	evel 7				//					/	C	omment	s	
1	Srw36-17C-0	4	AIR	7/14/04	1225	None	1*	3	May	M							F	*	60cc 57	RING	8	
			• • • • • • • • • • • • • • • • • • • •	'											_							
2														_	\dashv	_	_					
3						i l											-					
\vdash	<u> </u>														+	\dashv						
4				<u></u>								<u> </u>			_							
5						ļ											<u> </u>		<u> </u>			
-									 	1		 			\dashv				 · - · · - · ·			
6												1										
7				ĺ												İ	_					
						 -				├		 -		-	-	\dashv	<u> </u>					
8			,	1										1	- }	1			<u></u>			
9								_														<u> </u>
				ļ								<u> </u>										
10										1							-					
SAMP	LES COLLECTED BY	11		COURLER	AND AIR BII	LL NUMBER.			.!			i						COOLER	TEMPERATURE UPON REC	EIPT		
	RELUSQUISHED BY		2	1/	/ R	ECELVED BY			DATE	ТІМІ							SAMPL	LE'S CON	DITION LPON RECEIPT			
Tan	Me			Mer		4£		7	1-14-04	/300	<u> </u>											
<u> </u>	<u> </u>			ļ <u>'</u>				\longrightarrow		<u> </u>	_									<u></u>		
				ļ				\longrightarrow														
<u> </u>				<u> </u>				L		<u></u>						<u>. </u>						
	Dis	stribution	: White	e - Labo	ratory (*	To be re	turned w	ith Ana	lytical R	eport);	Go	ldenre	od - P	roject	File	; Yel	llow -	Proje	ect Data Manage	er		

APPENDIX B-3

DAILY OPENING, CLOSING, AND CONTINUING CALIBRATION VERIFICATION REPORTS

QA/QC CALIBRATION DATA

DATE: 07/14/04 SUPPLY SOURCE: CONTINUING CALIBRATION (OPENING) SUPELCO LOT #LSS-856 HP Labs Project #GF071404-L6 SUPPLY SOURCE: QUALITY CONTROL (CLOSING) SUPELCO LOT #LSS-857 INSTRUMENT: AGILENT 6850 GC / 5973 MASS SPECTROMETER

LAB-6

		NING STANDARI	2ND SOURCE (1ug/L) CLOSING				
COMPOUND	MASS	RESULT	%DIFF	MASS	RESULT	%DIFF	
CARBON TETRACHLORIDE	50	53,1	6.2%	50	44.0	12.0%	
CHLOROETHANE	50	51.2	2.4%	50	52.6	5.2%	
CHLOROFORM	50	50.3	0.6%	50	48.1	3.8%	
1,1-DICHLORO ETHANE	50	50.2	0.4%	50	49.0	2.0%	
1,2-DICHLORO ETHANE	50	50.5	1.0%	50	50.0	0.0%	
1,1-DICHLORO ETHENE	50	49.5	1.0%	50	52.0	4.0%	
CIS-1,2-DICHLORO ETHENE	50	50.0	0.0%	50	46.5	7.0%	
TRANS-1,2-DICHLORO ETHENE	50	50.7	1.4%	50	50.8	1.6%	
DICHLOROMETHANE	50	49.2	1.6%	50	53.4	6.8%	
TETRACHLORO ETHENE	50	51.6	3.2%	50	48.5	3.0%	
1,1,1,2-TETRACHLORO ETHANE	50	49.5	1.0%	50	41.9	16.2%	
1,1,2,2-TETRACHLORO ETHANE	50	52.9	5.8%	50	52.4	4.8%	
1,1,1-TRICHLORO ETHANE	50	53.0	6.0%	50	45.9	8.2%	
1,1,2-TRICHLORO ETHANE	50	49.0	2.0%	50	48.7	2.6%	
TRICHLORO ETHENE	50	49.3	1.4%	50	46.9	6.2%	
VINYL CHLORIDE	50	49.7	0.6%	50	51. 9	3.8%	
TRICHLOROFLUOROMETHANE (FR11)	50	50.1	0.2%	50	51.6	3.2%	
DICHLORODIFLUOROMETHANE (FR12)	50	51.4	2.8%	50	47.6	4.8%	
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	50	48.8	2.4%	50	49.3	1.4%	
BENZENE	50	48.3	3.4%	50	46.8	6.4%	
CHLOROBENZENE	50	49.8	0.4%	50	47.8	4.4%	
ETHYLBENZENE	50	49.4	1.2%	50	46.8	6.4%	
TOLUENE	50	49.7	0.6%	50	48.2	3.6%	
m&p-XYLENES	100	97.3	2.7%	100	92.9	7.1%	
o-XYLENE	50	48.2	3.6%	50	45.4	9.2%	

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY #2579

ANALYSES PERFORMED BY: MARK BURKE DATA REVIEWED BY: TAMARA DAVIS

QA/QC - CALIBRATION DATA

DATE: 07/14/04 CALIBRATION VERIFICATION

HP Labs Project #GF071404-L6 SUPPLY SOURCE: SUPELCO LOT #LSS-886

Lab 6 INSTRUMENT: AGILENT 6850 GC / 5973 MASS SPECTROMETER

Labo	CONTINUING STANDARD								
COMPOUND	MASS	RESULT	%DIFF						
CARBON TETRACHLORIDE	50	44.9	10.2%						
CHLOROETHANE	50	51.9	3.8%						
CHLOROFORM	50	49.7	0.6%						
1,1-DICHLORO ETHANE	50	49.6	0.8%						
1,2-DICHLORO ETHANE	50	52.4	4.8%						
1,1-DICHLORO ETHENE	50	53.4	6.8%						
CIS-1,2-DICHLORO ETHENE	50	49.2	1.6%						
TRANS-1,2-DICHLORO ETHENE	50	53.9	7.8%						
DICHLOROMETHANE	50	53.6	7.2%						
TETRACHLORO ETHENE	50	49.9	0.2%						
1,1,1,2-TETRACHLORO ETHANE	50	46.4	7.2%						
1,1,2,2-TETRACHLORO ETHANE	50	54.2	8.4%						
1,1,1-TRICHLORO ETHANE	50	47.2	5.6%						
1,1,2-TRICHLORO ETHANE	50	51.9	3.8%						
TRICHLORO ETHENE	50	47.6	4.8%						
VINYL CHLORIDE	50	52.7	5.4%						
TRICHLOROFLUOROMETHANE (FR11)	50	53.6	7.2%						
DICHLORODIFLUOROMETHANE (FR12)	50	48.2	3.6%						
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	50	50.3	0.6%						
BENZENE	50	48.6	2.8%						
CHLOROBENZENE	50	49.9	0.2%						
ETHYLBENZENE	50	49.4	1.2%						
TOLUENE	50	49.3	1.4%						
m&p-XYLENES	100	98.7	1.3%						
o-XYLENE	50	49.1	1.8%						

ANALYSES PERFORMED ON-SITE IN DOHS CERTIFIED MOBILE LABORATORY (CERT #1667)

ANALYSES PERFORMED BY: MARK BURKE DATA REVIEWED BY: TAMARA DAVIS